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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,719	01/12/2004	Kazushige Ida	247515US2TTC	1356

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EXAMINER

REHM, ADAM C

ART UNIT PAPER NUMBER

2875

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,719

Applicant(s)

IDA, KAZUSHIGE

Examiner

Adam C. Rehm

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/12/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: in Lines 6-7, the reference "one side...being provided opposite to said light source" appears incorrect and conflicts with description thereafter. As Examiner best understands, the side Applicant refers to is in fact adjacent to the light source rather than opposite to it. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over OKUNO (US 2001/0006461) in view of KURIHARA ET AL. (US 6,055,029) and JANG (US 6,538,710). OKUNO provides:

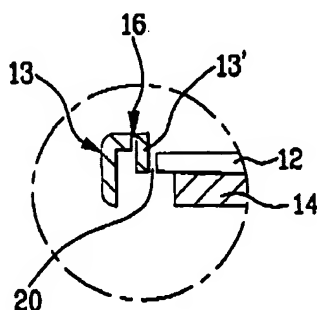
- A light source (8, Fig. 1);
- A rectangular light conversion member (11);
- A reflector covering the light source having edge portions (10);
- An optical sheet (5/6/7) between said edge portions and connecting the conversion member through the optical sheet (Fig. 1);
- A frame/holder supporting both sides of the conversion member (3).

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3. While OKUNO provides for the invention as cited above, OKUNO does not provide temperature-sensitive suppression means or a gap smaller than the width of the conversion member.

4. In regard to the suppression means, KURIHARA ET AL. teaches an adhesive tape (5) for securing a diffusion sheet (4) to a frame (3) for the purpose of preventing deformation caused by thermal expansion, Column 4, Lines 25-30). Notably, it is well known that the adhesiveness of tape is affected by temperature. It would have been obvious to one of ordinary skill in the art at the time of invention to modify OKUNO and use the adhesive tape as taught by KURIHARA as an alternate means to prevent deformation between the light guide and frame thereof.

5. In regard to the gap smaller than the width of the conversion member, JANG teaches a gap (20, Fig. 4A below) that is smaller than the width of the conversion member (12) for the purpose of provide room for the member (12) to expand without impacting the frame (13), thus preventing deformation (Column 1, Lines 38-44). It would have been obvious to one of ordinary skill in the art at the time of invention to modify OKUNO and use the gap as taught by JANG in order to prevent deformation upon thermal expansion of a light conversion member.

**FIG.4A**

6. Regarding Claim 5 and the temperature change variables, it would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that discovering an optimum value of a result effective variable only involves routine skill in the art. *In Re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over OKUNO (US 2001/0006461) in view of KURIHARA ET AL. (US 6,055,029) and JANG (US 6,538,710) as applied to claim 1 above, and further in view of KAO (US 6,773,127). OKUNO, KURIHARA and JANG provide the elements as cited above, but do not provide a prism. However, KAO provides a prism sheet (142) for the purpose of scattering light, which is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of invention to modify OKUNO and use the prism sheet as taught by KAO in order to scatter light.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. OKUNO (US 6,669,356) provides a light guide bonded to a frame with a cut to provide for thermal expansion.


9. KAO (2003/0231499) provides a light guide that utilizes tape to prevent displacement of an optical film.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACR
8/26/2005


ALAN CARIASO
PRIMARY EXAMINER